

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2005 Proceedings

Americas Conference on Information Systems
(AMCIS)

2005

Workshop: Practical Examples for Teaching Discrete Mathematics in an Information Systems Curriculum

Valerie J. Harvey

Robert Morris University, harvey@rmu.edu

Peter Y. Wu

Robert Morris University, wu@rmu.edu

John C. Turchek

Robert Morris University, turchek@rmu.edu

Follow this and additional works at: <http://aisel.aisnet.org/amcis2005>

Recommended Citation

Harvey, Valerie J.; Wu, Peter Y.; and Turchek, John C., "Workshop: Practical Examples for Teaching Discrete Mathematics in an Information Systems Curriculum" (2005). *AMCIS 2005 Proceedings*. 478.

<http://aisel.aisnet.org/amcis2005/478>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2005 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Workshop: Practical Examples for Teaching Discrete Mathematics in an Information Systems Curriculum

Valerie J. Harvey

Robert Morris University
harvey@rmu.edu

Peter Y. Wu

Robert Morris University
wu@rmu.edu

John. C. Turchek

Robert Morris University
turchek@rmu.edu

This workshop, designed for Faculty in Information Systems (IS) programs that have received or are seeking ABET IS accreditation, offers practical information and experience on how to design and implement a discrete mathematics course and modules for information systems (IS) programs seeking ABET IS accreditation or already accredited by ABET. The workshop will deliver small group practice with materials, online software resources, activities, and teaching techniques are targeted toward needs and interests of IS students. These materials and resources can be used (1) in a discrete mathematics course, (2) in modules in core curriculum courses, such as networking and data communications, operating systems, database management, systems analysis and design, programming and application development, network security, or (3) in both. Such materials, resources, and activities foster motivation and confidence for students as well as understanding of how the concepts presented serve in learning and will serve them in career settings. The technological and societal relevance of discrete mathematics concepts in the IS curriculum is covered. A matrix correlates each local ABET-accreditable core curriculum with a standard set of discrete mathematics topics to derive relevant topic coverage. Experiences in the information systems (IS) and information systems management (ISM) programs at Robert Morris University (RMU) guided the design of this workshop. The workshop includes orientation to rationale (based on matrix of discrete mathematics and IS core curriculum topics), design, and resources. shows how a formal discrete mathematics foundation supports the reliability of information technology, and covers assessment.